

AMENDMENT TO THE CLAIMS

1. (Previously Presented) Method for management of communication in a communication network comprising at least one base station and at least one terminal adapted to receiving data from said at least one base station, wherein the method comprises:
  - setting up a communication between one of said base stations, called a base station, and one of said terminals called a receiving terminal, using a first communication mode based on a single carrier modulation assigned to both uplink and downlink communication between the base station and the receiving terminal; and
  - changeover to a second communication mode using a multiple carrier modulation, a communication channel using said multiple carrier modulation being solely assigned to a downlink for the communication between said base station and said receiving terminal;

the first and second communication modes being implemented successively and alternately,

and wherein the changeover to the second communication mode is implemented according to at least one signaling information transmitted by the base station to the receiving terminal through the first communication mode.
2. (Previously Presented) Method according to claim 1, wherein said multiple carrier modulation is an OFDM type modulation with a guard interval.
3. (Previously Presented) Method according to claim 1, wherein said multiple carrier modulation is an IOTA type modulation.
4. (Previously Presented) Method according to claim 1, wherein said first communication mode is adapted to carrying out operations for management of setting up, maintaining, and

closing of a communication between the base station and the receiving terminal.

5. (Previously Presented) Method according to claim 1, wherein said communication network is a mobile communication network (UMTS).
6. (Previously Presented) Method according to claim 5, wherein said first communication mode uses at least one common channel (FACH) that is intended to all the terminals managed by said base station.
7. (Previously Presented) Method according to claim 6, wherein said first communication mode uses at least one access channel type (FACH) downlink common channel, enabling said changeover to said second communication mode.
8. (Previously Presented) Method according to claim 1, wherein said first communication mode uses at least one uplink common channel (RACH) to acknowledge data transmitted correctly to said receiving terminal when the second communication mode is being used.
9. (Previously Presented) Method according to claim 1, wherein said second communication mode is adapted to transmitting data at high speed between said base station and said receiving terminal.
10. (Previously Presented) Method according to claim 9, wherein said second communication mode is adapted to transmitting Internet type data to said receiving terminal.
11. (Previously Presented) Method according to claim 1, wherein said base station is in a cellular communication network.
12. (Previously Presented) Communication network comprising at least one base station and

at least one terminal adapted to receiving data from said at least one base station, wherein the communication network further comprises first and second communication modes:

- the first communication mode based on a single carrier modulation, being used when setting up a communication between one of said base stations, called a base station, and one of said terminals called a receiving terminal, the single carrier modulation being assigned to both uplink and downlink communication between the base station and the receiving terminal; and
- the second communication mode using a multiple carrier modulation being used on a communication channel using said multiple carrier modulation, solely assigned to a downlink for the communication between said base station and said receiving terminal,

the first and second communication modes being used successively and alternately, and

a changeover from the first to the second communication mode being implemented according to at least one signaling information transmitted by the base station to the receiving terminal through the first communication mode.

13. (Previously Presented) Transmission device designed to be implemented in a communication network comprising at least one terminal adapted to receiving data from said transmission device, wherein the transmission device comprises:

- means of setting up a communication between said transmission device and a first of said terminals, called a receiving terminal, using a first communication mode based on a single carrier modulation assigned to both uplink and downlink communication between the transmission device and the receiving terminal; and
- means of changing over to a second communication mode using a multiple carrier modulation, a communication channel using said multiple carrier modulation being solely assigned to a downlink for the communication between said transmission device and said receiving terminal;

said first and second communication modes being used successively and alternately,

the means of changing over from the first communication mode to the second communication mode being implemented according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication mode.

14. (Currently Amended) Receiving terminal that designed to be implemented in a communication network comprising at least one base station, said terminal being adapted to receiving data from said at least one ~~transmission device~~ base station, wherein the terminal comprises:

- means of setting up a communication between a first of said base stations, and said terminal using a first communication mode based on a single carrier modulation assigned to both uplink and downlink communication between the first base station and the receiving terminal; and
- means of changing to a second communication mode using a multiple carrier modulation, a communication channel using said multiple carrier modulation being solely assigned to a downlink for the communication between said first base station and said receiving terminal;

said first and second communication modes being used successively and alternately, the means of changing over from the first to the second communication mode being activated according to at least one signaling information transmitted by the first base station to the receiving terminal through the first communication mode.